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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,441	08/20/2003	Donald W. Dine	G00352/IUS	7039

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EXAMINER

BINDA, GREGORY JOHN

ART UNIT PAPER NUMBER

3679

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,441

Applicant(s)

DINE ET AL.

Examiner

Greg Binda

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MB

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 15-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20030820.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Election/Restrictions

1. Applicant's election without traverse of a propeller shaft (Group I) in the reply filed on October 7, 2004 is acknowledged.

2. Claims 15-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on October 7, 2004.

Drawings

3. The replacement drawings received on August 9, 2004 are objected to because Figs. 2 & 3 use an inappropriate cross hatch pattern for the foam synthetic resin support member 30. See MPEP § 608.02 for the appropriate pattern.

Specification

4. The disclosure is objected to because paragraph 0021 includes the undefined acronym "NVH".

Claim Objections

5. The claims are objected to as failing to comply with 37 CFR 1.75(i) because elements of the claims are not separated by line indentation.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The term "thin" in claims 1, 9 & 14 and the term "high" in claims 2 & 12 are relative terms which render the claims indefinite. The terms "thin" and "high" are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

b. Claims 1 & 9 recite that the support member is made of "rigid" foam but claims 5 & 13 recite that the foam is "flexible". It is not clear how the foam can be both rigid and flexible at the same time.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 6-10 & 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Breese et al, US 6,234,911 (Breese). Fig. 3 shows a propeller shaft assembly 15' comprising a metal (col. 4, line 3) thin-walled tubular member 16, a joint element 22 fixed to each end of the tubular member, and a support member 50 of length L1 fixed within the tubular member. In col. 5, line 65 the support member is disclosed as being made from foamed plastic. Fig. 3 shows the tubular member 16 has a length L and the ration $L1/L$ is less than 1.0.

10. Claims 1, 3, 6-10 & 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill et al, US 6,254,488 (Hill). Figs. 1 & 2 show a propeller shaft assembly 10 comprising a metal thin-walled tubular member 14, a joint element 32, 34 fixed to each end 16 of the tubular member, and a tubular support member 30 fixed within the tubular member. In col. 2, line 16 the support member is disclosed as being made from foamed plastic. The figures show the tubular member has a length that is greater than that of the support member.

11. Claims 1, 3, 4, 6-11 & 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Schuermann et al, EP 0 471 240 (Schuermann). The figure shows a propeller shaft assembly comprising a reinforced plastic (see "FRP" in the English language description provided by DERWENT) thin-walled tubular member 1, a joint element 2 fixed to each end of the tubular member, and a tubular support member 6 with a plurality of openings 9 fixed within the tubular member. In the English language description provided by DERWENT the support member is

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disclosed as being made from foamed plastic. The figure shows the tubular member 1 has a length that is greater than that of the support member 6.

12. Claims 1, 6-10 & 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Armitage et al, US 6,752,722 (Armitage). Fig. 3 shows a propeller shaft assembly 20 comprising a metal (col. 4, line 3) thin-walled tubular member 200, a joint element 202 fixed to each end of the tubular member, and a support member 204 fixed within the tubular member. In col. 4, lines 57+ the support member is disclosed as being made from open cell foamed plastic. Fig. 3 shows the tubular member has a length that is greater than that of the support member.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2, 5, 12 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armitage. In col. 4, lines 57+, Armitage discloses a support member comprising open-cell foamed plastic, but does not disclose the foam being impregnated with a high modulus resin. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to impregnate the foam of the support member with a high modulus resin in order to provide a means for sound absorption because such a modification is well known in the art. (See

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Fletmier et al, US 6,156,682 (Fletmier) in col. 1, lines 14-26 where it is disclosed that it is well known in the art to impregnate foam with a high modulus resin in order to provide a means for sound absorption.)

15. Claims 2, 5, 12 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Breese, Hill and Schuermann for the same reason noted immediately above.

Double Patenting

16. Applicant is advised that should claim 9 be found allowable, claim 8 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

17. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

18. Claim 6 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10/644,442 ('442). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 8 of '442 is directed to an assembly that includes all the limitations of the assembly recited in instant claim 6.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.


Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
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